

156: FIG. 1, habit, $\times \frac{1}{3}$; FIG. 2, spikelet, $\times 6$; FIG. 3, floret, $\times 8$. FIGS. 4–6, *P. NEMORALIS* L., var. *INTERIOR* (Rydb.) Butters and Abbe, from near Valley City, North Dakota, *H. F. Bergman*, no. 341 (determined by P. A. Rydberg as *P. interior*): FIG. 4, habit, $\times \frac{1}{3}$; FIG. 5, spikelet, $\times 6$; FIG. 6, floret, $\times 8$. FIGS. 7–9, \times *P. TORMENTUOSA*, hybr. nov. from Clearwater Lake, Cook Co., Minnesota, *Butters, Burns and Hendrickson*, no. 2 (TYPE): FIG. 7, habit, $\times \frac{1}{3}$; FIG. 8, spikelet, $\times 6$; FIG. 9, floret, $\times 8$.

A NEW FORM OF *HELIANTHUS* FROM MINNESOTA.—In the Duluth area *Helianthus giganteus* L. is predominantly represented by var. *subtuberosus* (Bourgeau) Britton. It differs from the typical variety in leaf arrangement which is mostly opposite. There occur, not uncommonly, individuals of the variety with at least a single whorl of leaves in threes. Moreover, there occur others in which the leaves of the middle stem are consistently whorled in threes or fours. The form with ternate or quaternate leaves is not restricted to a single locality; its observed range extends through thirty miles from Palmers to Fond du Lac in southern St. Louis Co. The form is herewith described as

HELIANTHUS GIGANTEUS L., var. *SUBTUBEROSUS* (Bourgeau) Britton, forma **verticillatus**, f. nov., foliis caulinis medianis verticillatis.—MINNESOTA: growing with the variety in a large colony on the east bank of Sucker River, north of the bridge, on the Old North Shore Road near Palmers, St. Louis Co., Aug., 19, 1945, *Lakela* no. 6140 (TYPE in Univ. of Minn. Herb.).

The form differs from the variety in the verticillate arrangement of the leaves of the middle stem. In the type-specimen the leaves are quaternate in six successive nodes of the middle stem. Toward the base of the stem they are opposite and there is a single pair just below the inflorescence. To facilitate pressing, the specimen had to be cut into three parts.

Additional collections were made as follows: Aug. 18, 1946, *Lakela* no. 6693, wooded border of the Old North Shore Road between Sucker and French Rivers; Aug. 28, 1946, *Lakela* no. 6732, wooded roadside, Highway 23, between New Duluth and Fond du Lac, each in southern St. Louis Co.—OLGA LAKELA, State Teachers College, Duluth.